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PATENT P57002

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: TAE-SUNG KIM, et al.

Serial No.: 10

10/767,281

Examiner:

WARREN, MATTHEW E.

Filed:

30 January 2004

Art Unit:

2815

For:

NOVEL CONDUCTIVE ELEMENTS FOR THIN FILM TRANSISTORS USED IN

A FLAT PANEL DISPLAY

# **INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents P.O.Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, describes, and provides copies of the following art references:

#### **FOREIGN PATENT REFERENCE:**

- Korean Patent Publication No. 1020020055436 to Fujita et al., entitled ACTIVE
  MATRIX TYPE LIQUID CRYSTAL DISPLAY DEVICE, published on 8 July 2002
  (This reference has been cited by the Applicant in the Information Disclosure
  Statement filed on 21 March 2006 and considered by the Examiner on 27 April
  2006); and
- Korean Patent Registration No. 10-0235472 to Oana et al., entitled DISPLAY
  DEVICE SUBSTRATE AND METHOD OF MANUFACTURING THE SAME, issued
  on 27 September 1999.

### **OTHER DOCUMENTS:**

• Office action issued by the Korean Intellectual Property Office in corresponding Korean Application No. 10-2003-0015357, issued on 29 August 2006.

#### **DISCUSSION**

As written in the Korean Office action in applicant's Korean Patent Application No. 10-2003-0015357, **Oana** *et al.*'KR472 provides a display device substrate, in particular, a display device substrate useful in a liquid crystal display or the like including a large-sized screen. The display device substrate includes a first wiring layer formed on a substrate made of an insulating material, a second wiring layer formed to cross the first wiring layer, and an insulating film interposed between the first and second wiring layers at a cross point portion therebetween, wherein the first wiring layer is constituted by an electrode wiring layer made of a material containing aluminum as a main component and a surface covering layer formed by causing a refractory metal to denature the electrode wiring layer. Provided is also a method of manufacturing a display device substrate, which includes forming an electrode wiring layer made of a material containing aluminum as a main component on a substrate made of an insulating material, forming a thin film made of a refractory metal on the electrode wiring layer, and performing heat treatment to cause the refractory metal to denature a surface portion of the electrode wiring layer, thereby forming a surface covering layer.

Pursuant to 37 CFR §1.97(d), the undersigned attorney hereby certifies that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three (3) months prior to the filing of the statement.

The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging and thorough search of the relevant art.

No fee is incurred by this Statement.

Respectfully submitted,

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Folio: P57002 Date: 9/25/06 I.D.: REB/ny

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of

this form with next communication to applicant.